

DETAILED ESTIMATE

For the Work of

“Improvements and Restoration of
Roads at Kaveri Layout, Southern
Side, Dasarahalli Extension and Other
Roads in Ward No 06, Byatarayanpura
Sub Division”

BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK:- Improvements and Restoration of Roads at Kaveri Layout, Souther Side, Dasarahalli Extension and Other Roads in Ward No 06, Byatarayanpura Sub Division

							Estimation Cost.Rs		10000000.00
Sl No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
1	KSRRB 300-1. Earthwork excavation by manual means for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications(P.No-143 & 136 ,I No-19.1&17.4& 17.1) 5km lead= 57+2.0x1.28x5 =69.80								
	For Drain	Cum							
	Kaveri Layout								
	Om Shakhti Nilaya (W0676)		2	96.00	1.10	0.90	190.08		
	For Culvert								
	Om Shakhti Nilaya (W0676)		2	6.00	1.50	0.95	17.10		
	For Drain Desilt								
	Kaveri Layout								
	#64/65 Little Ville (W0999)		2	133.00	0.50	0.40	53.20		
	Little Ville School Opposite Road (W0842)		2	66.40	0.50	0.40	26.56		
	#31 Gnanitha Tower (W0844)		2	65.00	0.50	0.40	26.00		
	# Saroja House (W0684)		2	64.00	0.50	0.40	25.60		
	#12 Shri SG Garag House (W1011)		2	102.00	0.50	0.40	40.80		
	Basic rate	130							
	Area weightage 6%	7.8							
	5Km lead & Lift= 57+(2*1.28*5)	69.8							
	Sub Total	207.6							
	Total						379.34	207.60	78751.00
2	Removing and refixing stone slabs of drains and pointing in CM (1:3) (P.No-27,I No-5.33)								
	Open Drain (Sides & Bottom)	Sqm	Width=Perimeter of Drain in U Shape						
	Kaveri Layout								
	#64/65 Little Ville (W0999)		2	133.00	1.35		359.10		
	Little Ville School Opposite Road (W0842)		2	66.40	1.35		179.28		
	#31 Gnanitha Tower (W0844)		2	65.00	1.35		175.50		
	# Saroja House (W0684)		2	64.00	1.35		172.80		
	#12 Shri SG Garag House (W1011)		2	102.00	1.35		275.40		
			Total				1162.08		
	Deduct 20% for Missing Damaged						232.42		
	Consider 80% Qnty for Removing & Refixing						929.66		
	Basic rate	105							
	Area weightage 6%	6.3							
	Sub Total	111.3							
	Total						929.66	111.30	103472.00
	Providing granite slabs of selected quality roughly dressed havinf a size of 7.5cms thick and fixed in cement mortar (1:6) including fixing curing etc., complete.(P.No.27,I.No.5.31.1)								
	Provide 20% for missing and Damaged	Sqm	From Item No.01				232.42		

Sl No	Description of work	Unit	Measurement				Qty	Rate	Amount
			No.	L	B	D			
	Basic rate	700							
	Area weightage 6%	42							
	Sub Total	742							
	Total						232.42	742.00	172453.00
4	KSRB 4-1.3 : Providing and laying in position plain cement concrete of mix 1:4:8 with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregates @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.13, I.No. 4.3)								
	For Drain	Cum							
	Kaveri Layout								
	Om Shakhti Nilaya (W0676)		2	96.00	1.10	0.15	31.68		
	For Culvert								
	Kaveri Layout								
	Om Shakhti Nilaya (W0676)		2	6.00	1.50	0.15	2.70		
	Basic rate	5301.69							
	Area weightage 6%	318.1014							
	Sub Total	5619.7914							
	Total						34.38	5619.79	193209.00
5	Providing laying plain/ reinforced cement concrete for side Drains Using M20 nominal mix Concrete with OPC at 300kgs. With 20mm and Down size granite metal coarse aggregate at 0.69cum and fine aggregate at 0.43cum Machne mixed, well compacted for wall and Bottom including centering shuttering, cost of materials, HOM of Machinery, Curing Etc., Complete Excluding cost of Steel as per morth MORTH specification No. 1500, 1700, 2200. Including Cost of material, Labour, HOM complete as per Specification-WALL & Bottom thickness 15Cm(Item No 37.59.2 page no 271)								
	Drain Bottom Raft	Cum							
	Kaveri Layout								
	Om Shakhti Nilaya (W0676)		2	96.00	0.90	0.15	25.92		
	Drain Side Walls								
	Kaveri Layout								
	Om Shakhti Nilaya (W0676)		4	96.00	0.15	0.60	34.56		
							Sub Total	60.48	
	Culvert Bottom Raft								
	Kaveri Layout								
	Om Shakhti Nilaya (W0676)		2	6.00	1.30	0.20	3.12		
	Culvert Side Walls								
	Kaveri Layout								
	Om Shakhti Nilaya (W0676)		4	6.00	0.30	0.60	4.32		
							Sub Total	7.44	
	Basic rate	7002.82							
	Area weightage 6%	420.1692							
	Sub Total	7422.9892							
	Total						67.92	7422.99	504170.00
6	KSRB M2200-6 Providing T.M.T bars Fe 500 steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. MORTH Specification NO.1600&2200Specification No. Pg No.229 Item No.28.8.2								
	For Drain	Cum	From Item No.05				60.48		
		kg	Steel assumed 60Kg/Cum of Concrete				3628.80		
		tonne					3.63		
	For Culvert	Cum	From Item No.05				7.44		
		kg	Steel assumed 90 Kg/Cum of Concrete				669.60		
		tonne					0.67		

Sl No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
	Basic rate	75610							
	Area weightage 6%	4536.6							
	Sub Total	80146.6							
	Total						4.30	80146.60	344503.00
7	Providing and Fixing pre cast covering Slab made out of CC 1:2:4 with 10cm thick and Finishing cutting ,including form work,curing,including cost of alll materials, labour,hire charges of machinery,loading,unloading,lead and lift,transportation etc ,copmplete. (Data Rate)								
	Road	Sqm							
	Kaveri Layout								
	Om Shakhti Nilaya (W0676)		2	96.00	0.90		172.80		
	Data rate	1922							
	Total						172.80	1922.00	332122.00
8	Providing and Fixing pre cast covering Slab 250mm thick made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As per Engineer incharge								
	Culver cover Slab	Sqm							
	Om Shakhti Nilaya (W0676)		2	6.00	1.20		14.40		
	Data rate	5418							
	Total						14.40	5418.00	78020.00
9	KSRRB M300-14. Excavation for roadwork in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301Loading and unloading with 5km lead= (I No-19.14,P No-143)								
	Road	Cum							
	Sanitary Line								
	Kaveri Layout								
	Cross Road		1	120.00	1.20	0.60	86.40		
	Om Shakhti Nilaya (W0676)		1	96.00	1.20	0.60	69.12		
	#64/65 Little Ville (W0999)		1	133.00	1.20	0.60	95.76		
	Little Ville School Opposite Road (W0842)		1	66.40	1.20	0.60	47.81		
	#31 Gnanitha Tower (W0844)		1	65.00	1.20	0.60	46.80		
	# Sanuja House (W0684)		1	64.00	1.20	0.60	46.08		
	#12 Shri SG Garag House (W0811)		1	102.00	1.20	0.60	73.44		
	1st Main Frank Road		1	157.00	1.20	0.60	113.04		
	Cross Road-01		1	27.00	1.20	0.60	19.44		
	Water Supply Line								
	Kaveri Layout								
	Cross Road		1	120.00	1.00	0.60	72.00		
	Om Shakhti Nilaya (W0676)		1	96.00	1.00	0.60	57.60		
	#64/65 Little Ville (W0999)		1	133.00	1.00	0.60	79.80		
	Little Ville School Opposite Road (W0842)		1	66.40	1.00	0.60	39.84		
	#31 Gnanitha Tower (W0844)		1	65.00	1.00	0.60	39.00		
	# Sanuja House (W0684)		1	64.00	1.00	0.60	38.40		
	#12 Shri SG Garag House (W0811)		1	102.00	1.00	0.60	61.20		
	Marayanta Palya								
	1st Main Frank Road		1	157.00	1.00	0.60	94.20		
	Cross Road-01		1	27.00	1.00	0.60	16.20		
	Basic rate	41							
	Area weightage 6%	2.46							
	5km lead								
	(CPI 1285)	12.8							
	Sub Total	56.26							

Sl No	Description of work	Unit	Measurement				Qty	Rate	Amount
			No.	L	B	D			
	Total						1096.13	56.26	61669.00
10	Supplying and laying Sand / Crushed Sand (Page No III Sl. No. 51 PWD SR 2018-2019)								
	Road	Cum							
	Sanitary Line								
	Kaveri Layout								
	Cross Road		1	120.00	1.20	0.30	43.20		
	Om Shakhti Nilaya (W0676)		1	96.00	1.20	0.30	34.56		
	#64/65 Little Ville (W0999)		1	133.00	1.20	0.30	47.88		
	Little Ville School Opposite Road (W0842)		1	66.40	1.20	0.30	23.90		
	#31 Gnanitha Tower (W0844)		1	65.00	1.20	0.30	23.40		
	# Saroja House (W0684)		1	64.00	1.20	0.30	23.04		
	#12 Shri SG Garag House (W1011)		1	102.00	1.20	0.30	36.72		
	Mariyanna Palya								
	1st Main Frank Road		1	157.00	1.20	0.30	56.52		
	Cross Road-01		1	27.00	1.20	0.30	9.72		
	Water Supply Line								
	Kaveri Layout								
	Cross Road		1	120.00	1.00	0.30	36.00		
	Om Shakhti Nilaya (W0676)		1	96.00	1.00	0.30	28.80		
	#64/65 Little Ville (W0999)		1	133.00	1.00	0.30	39.90		
	Little Ville School Opposite Road (W0842)		1	66.40	1.00	0.30	19.92		
	#31 Gnanitha Tower (W0844)		1	65.00	1.00	0.30	19.50		
	# Saroja House (W0684)		1	64.00	1.00	0.30	19.20		
	#12 Shri SG Garag House (W1011)		1	102.00	1.00	0.30	30.60		
	Mariyanna Palya								
	1st Main Frank Road		1	157.00	1.00	0.30	47.10		
	Cross Road-01		1	27.00	1.00	0.30	8.10		
	Basic rate	1680.95							
	Total						548.06	1680.95	921269.00
11	KSRRB 300-64.1. Extra for watering the earth to bring the earth upto required optimum moisture content manually including cost of all labour complete as per specifications. (Page No. 148/ Item No. 19.71 PWD SR 2018-19)								
	Road	Cum							
	Sanitary Line								
	Kaveri Layout								
	Cross Road		1	120.00	1.20	0.30	43.20		
	Om Shakhti Nilaya (W0676)		1	96.00	1.20	0.30	34.56		
	#64/65 Little Ville (W0999)		1	133.00	1.20	0.30	47.88		
	Little Ville School Opposite Road (W0842)		1	66.40	1.20	0.30	23.90		
	#31 Gnanitha Tower (W0844)		1	65.00	1.20	0.30	23.40		
	# Saroja House (W0684)		1	64.00	1.20	0.30	23.04		
	#12 Shri SG Garag House (W1011)		1	102.00	1.20	0.30	36.72		
	Mariyanna Palya								
	1st Main Frank Road		1	157.00	1.20	0.30	56.52		
	Cross Road-01		1	27.00	1.20	0.30	9.72		
	Water Supply Line								
	Kaveri Layout								

Sl No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
	1st Main Frank Road		1	157.00	6.00		942.00		
	Cross Road-01		1	27.00	6.90		186.30		
	Basic rate	6							
	Area weightage 6%	0.36							
	Sub Total	6.36							
	Total						4408.60	6.36	28039.00
14	KSRRB M400-17. Providing, laying, spreading and compacting cushioned stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications(P.No-155,I No-20.18)								
	Road	Cum							
	Kaveri Layout								
	Cross Road		1	120.00	5.00	0.20	120.00		
	Om Shakhti Nilaya (W0676)		1	96.00	6.10	0.20	117.12		
	#64/65 Little Ville (W0999)		1	133.00	4.90	0.20	130.34		
	Little Ville School Opposite Road (W0842)		1	66.40	5.00	0.20	66.40		
	#31 Gnanitha Tower (W0844)		1	65.00	4.60	0.20	59.80		
	# Saroja House (W0684)		1	64.00	4.40	0.20	56.32		
	#12 Shri SG Garag House (W1011)		1	102.00	5.20	0.20	106.08		
	Mariyanna Palya								
	1st Main Frank Road		1	157.00	6.00	0.20	188.40		
	Cross Road-01		1	27.00	6.90	0.20	37.26		
	Sanitary Line								
	Kaveri Layout								
	Cross Road		1	120.00	1.20	0.25	36.00		
	Om Shakhti Nilaya (W0676)		1	96.00	1.20	0.25	28.80		
	#64/65 Little Ville (W0999)		1	133.00	1.20	0.25	39.90		
	Little Ville School Opposite Road (W0842)		1	66.40	1.20	0.25	19.92		
	#31 Gnanitha Tower (W0844)		1	65.00	1.20	0.25	19.50		
	# Saroja House (W0684)		1	64.00	1.20	0.25	19.20		
	#12 Shri SG Garag House (W1011)		1	102.00	1.20	0.25	30.60		
	Mariyanna Palya								
	1st Main Frank Road		1	157.00	1.20	0.25	47.10		
	Cross Road-01		1	27.00	1.20	0.25	8.10		
	Water Supply Line								
	Kaveri Layout								
	Cross Road		1	120.00	1.00	0.25	30.00		
	Om Shakhti Nilaya (W0676)		1	96.00	1.00	0.25	24.00		
	#64/65 Little Ville (W0999)		1	133.00	1.00	0.25	33.25		
	Little Ville School Opposite Road (W0842)		1	66.40	1.00	0.25	16.60		
	#31 Gnanitha Tower (W0844)		1	65.00	1.00	0.25	16.25		
	# Saroja House (W0684)		1	64.00	1.00	0.25	16.00		
	#12 Shri SG Garag House (W1011)		1	102.00	1.00	0.25	25.50		
	Mariyanna Palya								
	1st Main Frank Road		1	157.00	1.00	0.25	39.25		
	Cross Road-01		1	27.00	1.00	0.25	6.75		
	Basic rate	1888							
	Area weightage 6%	113.28							
	Sub Total	2001.28							
	Total						1338.44	2001.28	2678594.00

Sl No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
15	KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications Clause 502 of MORTH V revision(P.No-158,I No-21.6)								
	Road	Sqm							
	Kaveri Layout								
	Cross Road		1	120.00	5.00		600.00		
	Om Shakhti Nilaya (W0676)		1	96.00	6.10		585.60		
	#64/65 Little Ville (W0999)		1	133.00	4.90		651.70		
	Little Ville School Opposite Road (W0842)		1	66.40	5.00		332.00		
	#31 Gnanitha Tower (W0844)		1	65.00	4.60		299.00		
	# Saroja House (W0684)		1	64.00	4.40		281.60		
	#12 Shri SG Garag House (W1011)		1	102.00	5.20		530.40		
	Mariyanna Palya								
	1st Main Frank Road		1	157.00	6.00		942.00		
	Cross Road-01		1	27.00	6.90		186.30		
	Basic rate	32							
	Area weightage 6%	1.92							
	Sub Total	33.92							
	Total						4408.60	33.92	149540.00
16	KSRRB 500-11. Providing and laying bituminous macadam on prepared surface with crushed coarse aggregates as per design mix formula for base / binding course including loading of aggregates with F.E. loader, hot mixing of stone aggregates and bitumen in hot mix plant, transporting the mixed material in tipper to paver and laying mixed materials with paver finisher to the required level and grade, rolling by smooth wheeled, vibratory & tandem rollers to achieve the desired density, but excluding cost of primer / tack coat including lead, lift and cost of all materials, labour, HOM of machineries complete as per								
	Road	Cum							
	Kaveri Layout								
	Cross Road		1	120.00	5.00	0.05	30.00		
	Om Shakhti Nilaya (W0676)		1	96.00	6.10	0.05	29.28		
	#64/65 Little Ville (W0999)		1	133.00	4.90	0.05	32.59		
	Little Ville School Opposite Road (W0842)		1	66.40	5.00	0.05	16.60		
	#31 Gnanitha Tower (W0844)		1	65.00	4.60	0.05	14.95		
	# Saroja House (W0684)		1	64.00	4.40	0.05	14.08		
	#12 Shri SG Garag House (W1011)		1	102.00	5.20	0.05	26.52		
	Mariyanna Palya								
	1st Main Frank Road		1	157.00	6.00	0.05	47.10		
	Cross Road-01		1	27.00	6.90	0.05	9.32		
	Basic rate	5533							
	Area weightage 6%	331.98							
	Sub Total	5864.98							
	Total						220.43	5864.98	1292818.00
17	KSRRB 500-7. Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM complete as per specifications (P.No-161,I No-21.7)								
	Road	Sqm							
	Kaveri Layout								
	Cross Road		1	120.00	5.00		600.00		
	Om Shakhti Nilaya (W0676)		1	96.00	6.10		585.60		
	#64/65 Little Ville (W0999)		1	133.00	4.90		651.70		
	Little Ville School Opposite Road (W0842)		1	66.40	5.00		332.00		
	#31 Gnanitha Tower (W0844)		1	65.00	4.60		299.00		
	# Saroja House (W0684)		1	64.00	4.40		281.60		

Sl No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
	#12 Shri SG Garag House (W1011)		1	102.00	5.20		530.40		
	Mariyanna Palya								
	1st Main Frank Road		1	157.00	6.00		942.00		
	Cross Road-01		1	27.00	6.90		186.30		
	Basic rate	12							
	Area weightage 6%	0.72							
	Sub Total	12.72							
	Total						4408.60	12.72	56078.00
18	KSRRB M500-19. Providing and laying bituminous concrete using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications Clause 507 of MORTH V revision using 40/60 TPH capacity H.M.P. with Mechanical Paver Gr-II (30 mm to 45 mm) with 5.4% VG-30 Bitumen (P.No-162, I No-21.22.6)								
	Road	Cum							
	Kaveri Layout								
	Cross Road		1	120.00	5.00	0.04	24.00		
	Om Shakhti Nilaya (W0676)		1	96.00	6.10	0.04	23.42		
	#64/65 Little Ville (W0999)		1	133.00	4.90	0.04	26.07		
	Little Ville School Opposite Road (W0842)		1	66.40	5.00	0.04	13.28		
	#31 Gnanitha Tower (W0844)		1	65.00	4.60	0.04	11.96		
	# Saroja House (W0684)		1	64.00	4.40	0.04	11.26		
	#12 Shri SG Garag House (W1011)		1	102.00	5.20	0.04	21.22		
	Mariyanna Palya								
	1st Main Frank Road		1	157.00	6.00	0.04	37.68		
	Cross Road-01		1	27.00	6.90	0.04	7.45		
	Basic rate	7972							
	Area weightage 6%	478.32							
	Sub Total	8450.32							
	Total						176.34	8450.32	1490164.00
19	KSRRB M800-13. Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803 (P.No-182, I No-24.15)								
	Road	Sqm							
	Kaveri Layout								
	Cross Road		2	120.00	0.10		24.00		
	Om Shakhti Nilaya (W0676)		2	96.00	0.10		19.20		
	#64/65 Little Ville (W0999)		2	133.00	0.10		26.60		
	Little Ville School Opposite Road (W0842)		2	66.40	0.10		13.28		
	#31 Gnanitha Tower (W0844)		2	65.00	0.10		13.00		

Sl No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
	# Saroja House (W0684)		2	64.00	0.10		12.80		
	#12 Shri SG Garag House (W1011)		2	102.00	0.10		20.40		
	Mariyanna Palya								
	1st Main Frank Road		2	157.00	0.10		31.40		
	Cross Road-01		2	27.00	0.10		5.40		
	Basic rate	429							
	Area weightage 6%	25.74							
	Sub Total	454.74							
	Total						166.08	454.74	75524.00
Grand Total									8749619.00
DPR Charges (1% of estimated cost)									100000.00
Project management And Consultancy Charges(1% of estimated cost)									100000.00
GST Charges (12% of estimated cost)									1049955.00
Miscellenious and rounding									426.00
Total Amount									10000000.00
RUPEES ONE CRORE ONLY									

CERTIFICATE:

- 1) The work spot has been inspected and found to be necessary
- 2) The work spot comes under B.B.M.P
- 3) The provisions made in the estimate are necessary and minimum
- 4) The estimate is based on C.S.R of 2018-2019, Issue rates and Data Rates.


Assistant Engineer
BBMP


Assistant Executive Engineer
BBMP


Executive Engineer
BBMP

